

**PATENT APPLICATION**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Jan Louis Josephina SERVAES, et al.

Attorney Docket Q65151

Appln. No.: Not Assigned

Group Art Unit: Not Assigned

Confirmation No.: Not Assigned

Examiner: Not Assigned

Filed: July 23, 2001

For: LOW VOLTAGE BROADBAND LINE DRIVER

**PRELIMINARY AMENDMENT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to examination, please amend the above-identified application as follows:

**IN THE CLAIMS:**

**Please enter the following amended claims:**

3. (Amended) The broadband line driver according to claim 1,  
wherein a feedback circuit is connected between an output of the transforming device and  
the input of the amplifying device.

5. (Amended) The broadband line driver according to claim 1, comprising:  
- a first input terminal (IN1) and a second input terminal (IN2) as well as a first output  
terminal (OUT1) and a second output terminal (OUT2);  
- the amplifying device (A) having a first and a second device input terminal (AI1, AI2)  
and a first and a second device output terminal (AO1, AO2),

- the transforming device comprising a transformer (T) with transformation ratio  $1:n$  ( $n \geq 1$ ) and comprising a primary winding with a first terminal (T11) and a second terminal (T12) and a secondary winding with a first terminal (T21) and a second terminal (T22), the first device output terminal (AO1) being coupled to a first terminal (T11) of the primary winding of the transformer (T), and the second device output terminal (AO2) being coupled to the second terminal (T12) of the primary winding, the first terminal (T21) of the secondary winding being coupled to the first output terminal (OUT1), and the second terminal (T22) being coupled to the second output terminal (OUT2),

- a first resistor (R17) being connected between the second output terminal (OUT2) and the first device input terminal (AI1), and a second resistor (R18) being coupled between the first output terminal (OUT1) and the second device input terminal (AI2).

8. (Amended)The broadband line driver according to claim 6,

CHARACTERISED IN THAT the fifth resistor (R13) and the sixth resistor (R14) have substantially the same resistance value.

9. (Amended)The broadband line driver according to claim 6,

CHARACTERISED IN THAT the seventh resistor (R15) and the eighth resistor (R16) have substantially the same resistance value.

10. (Amended)The broadband line driver according to claim 5,

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CHARACTERISED IN THAT the first resistor (R17) and the second resistor (R18) have substantially the same resistance value.

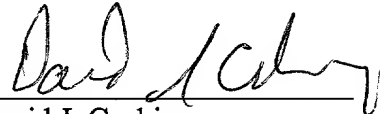
11. (Amended) Digital subscriber line analogue front end comprising a broadband line driver according to claim 1.

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REMARKS

Entry and consideration of this Amendment is respectfully requested.

Respectfully submitted,



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**APPENDIX**

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE CLAIMS:**

**The claims are amended as follows:**

3. (Amended) The broadband line driver according to claim 1 ~~or 2~~,

wherein a feedback circuit is connected between an output of the transforming device and the input of the amplifying device.

5. (Amended) The broadband line driver according to ~~any of the preceding~~  
~~claims~~ claim 1, comprising:

- a first input terminal (IN1) and a second input terminal (IN2) as well as a first output terminal (OUT1) and a second output terminal (OUT2);

- the amplifying device (A) having a first and a second device input terminal (AI1, AI2) and a first and a second device output terminal (AO1, AO2),

- the transforming device comprising a transformer (T) with transformation ratio 1:n ( $n \geq 1$ ) and comprising a primary winding with a first terminal (T11) and a second terminal (T12) and a secondary winding with a first terminal (T21) and a second terminal (T22), the first device output terminal (AO1) being coupled to a first terminal (T11) of the primary winding of the transformer (T), and the second device output terminal (AO2) being coupled to the second terminal (T12) of the primary winding, the first terminal (T21) of the secondary winding being

coupled to the first output terminal (OUT1), and the second terminal (T22) being coupled to the second output terminal (OUT2),

- a first resistor (R17) being connected between the second output terminal (OUT2) and the first device input terminal (AI1), and a second resistor(R18) being coupled between the first output terminal (OUT1) and the second device input terminal (AI2).

8. (Amended) The broadband line driver according to ~~any of claims 6 or 7~~ claim 6, CHARACTERISED IN THAT the fifth resistor (R13) and the sixth resistor (R14) have substantially the same resistance value.

9. (Amended) The broadband line driver according to ~~any of claims 6 to 8~~ claim 6, CHARACTERISED IN THAT the seventh resistor (R15) and the eighth resistor (R16) have substantially the same resistance value.

10. (Amended) The broadband line driver according to ~~any of claims 5 to 9~~ claim 5, CHARACTERISED IN THAT the first resistor (R17) and the second resistor (R18) have substantially the same resistance value.

11. (Amended) Digital subscriber line analogue front end comprising a broadband line driver according to ~~any of the previous claims~~ claim 1.